

*Coastal Risks : risks for societies' facing environmental changes versus for nature under human pressure*  
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# Blue growth and development opportunities

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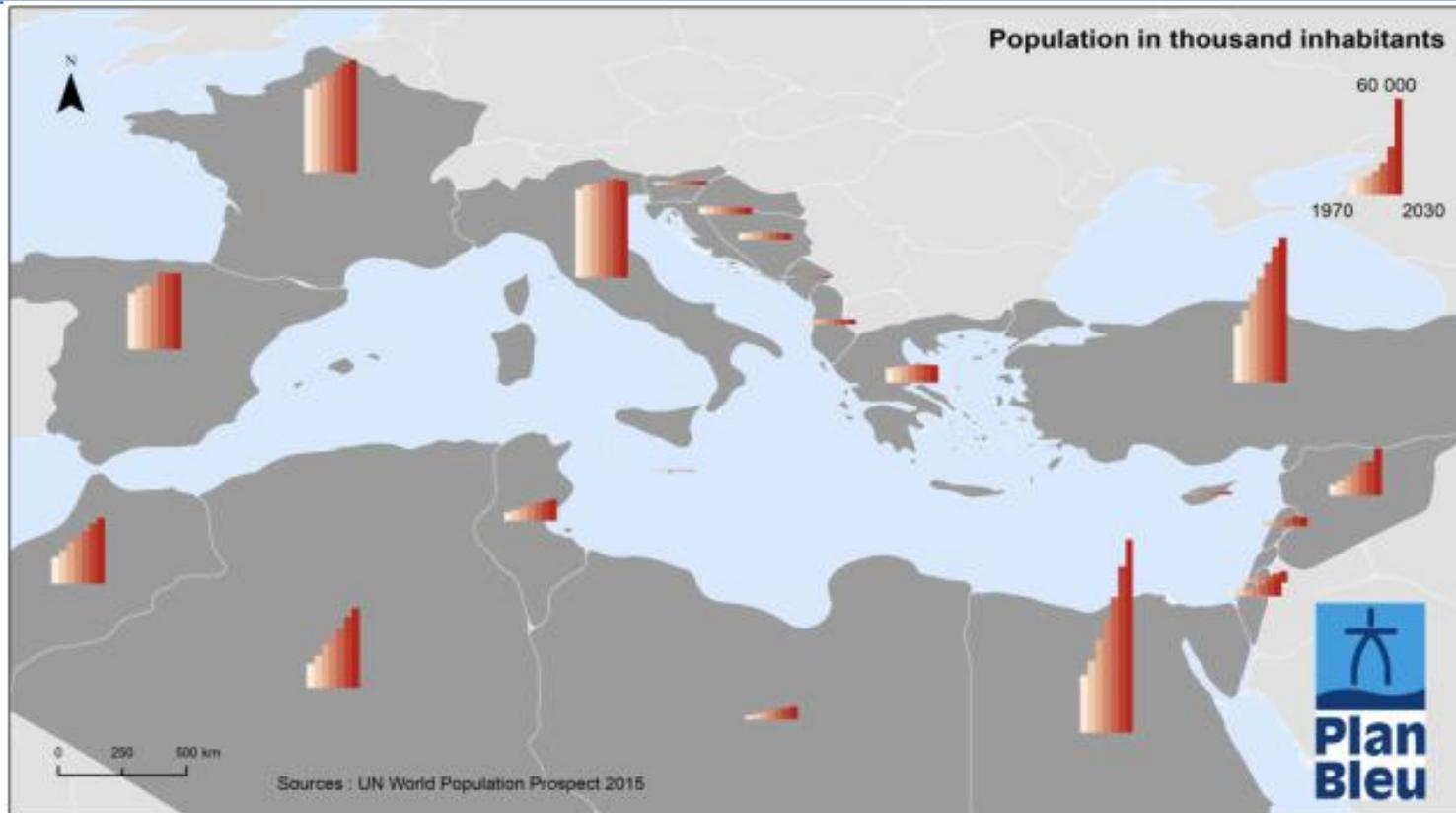
# Population and Development

- The Mediterranean region is undergoing **intensive demographic**, social, cultural, economic and environmental changes.
- Population growth combined with the **growth of coastal (peri) urban hubs** generates multiple **environmental pressures** stemming from **increased demand for water and energy resources**, generation of **air and water pollution** in relation to **wastewater** discharge or sewage overflows, waste generation, land consumption and degradation of habitats.
- These pressures are further **amplified by tourism**, often concentrated in Mediterranean coastal areas, and **overall by climate change**.

➡ **Unsustainable use of living resources, landscapes and coastlines**



# Population and Development

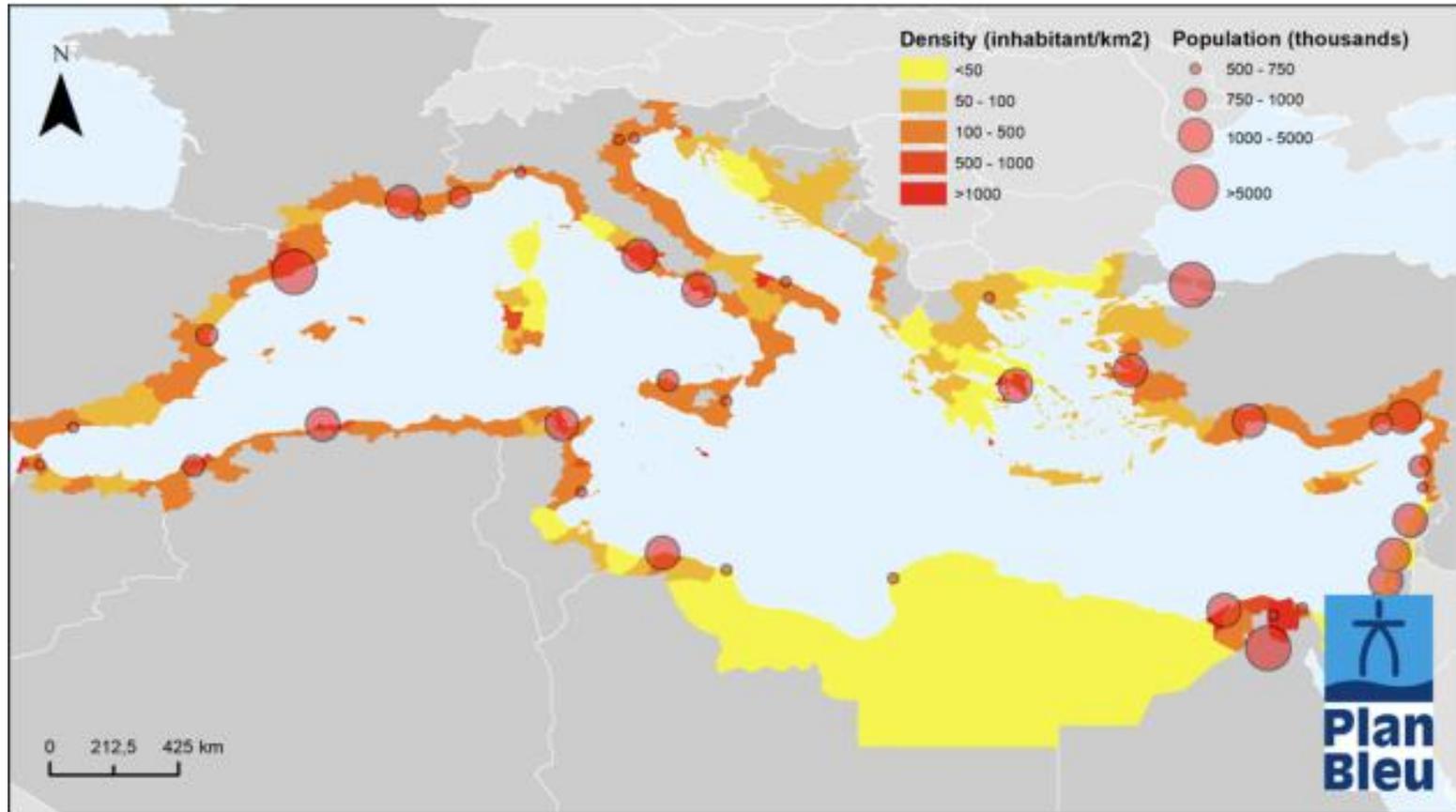


- The total population of the Mediterranean countries **grew from 281 million in 1970 to 419 million in 2000 and to 472 million in 2010.** (Plan Bleu, based on UN World Population Prospect 2015 and on national population censuses).
- The Mediterranean region's population is concentrated near the coasts. More than a **third** live in coastal administrative entities.

# Population and Development

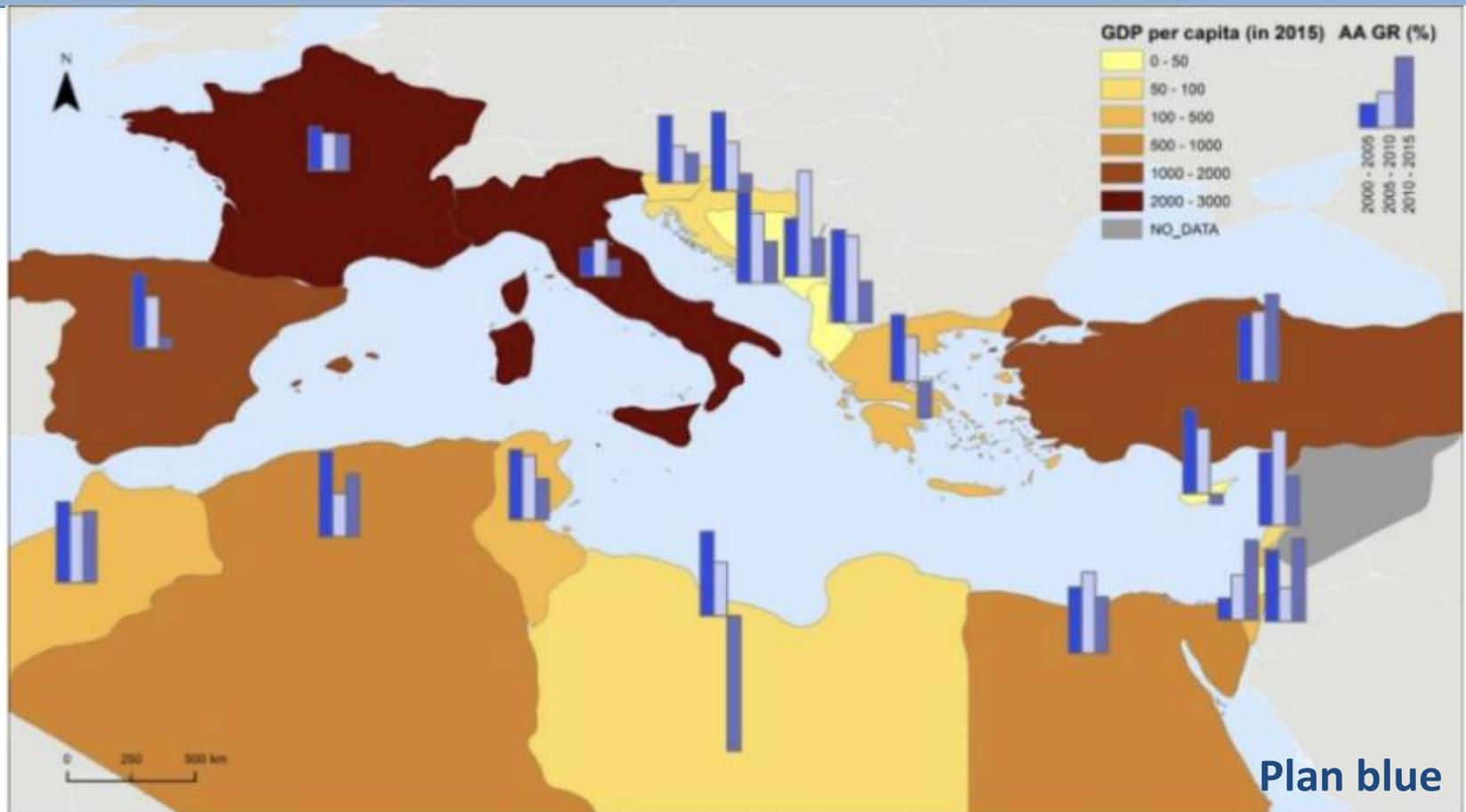
- Population development **growth in the southern** Mediterranean countries.
  - While population development in the **north is almost stagnant**.
- ⇒ Strong population **growth in the southeast** results in **overexploitation of water, land, and other resources**.
- **Land productivity is decreasing** accordingly. In contrast, many rural areas in the northern countries experience **abandonment of agricultural land**, with subsequent encroachment of shrubs and trees and a greening of the land.

# Population and Development



- The **southern and eastern** countries of the Mediterranean are **rapidly urbanizing** – with almost all of the future population growth projected to be in the cities.
- **Coastal areas** are usually **rich in their natural resources** that provide great opportunities for economic activities, especially resource-based economic activities.

# Population and Development



- In 2015, the average income per capita in the **South and East Mediterranean** countries is **2.5 times lower** than the average income in the **EU Mediterranean** countries.

# Population and Development

- The **GDP growth** rate in the **south and east** Mediterranean countries are **much higher** than those of the **EU** Mediterranean countries.
- However, they are considered **low** when compared to the population growth rates, as the **demographic growth** is still high in the southern Mediterranean countries.
- The share of the Mediterranean GDP in the **world GDP is decreasing**: from more than 13.5% in 1990 to 11.5% in 2010 and 9.7% in 2015. Meanwhile, the share of the Mediterranean population remains constant in the world population (about **7%**).

# Land-based pollution sources

- Approximately 80 % of **marine pollution** originates from **land-based** human activities. Different types of pollutants (e.g. nutrients, heavy metals, Persistent Organic Pollutants, marine litter) **affect** marine and coastal **ecosystems** and **related economic** activities such as **fishing or tourism**.
- **Waste** management has become a **major concern** for Mediterranean countries where waste represents **an enormous loss of resources** in the form of both materials and energy.
- Due to the large share of the population and human activities located in coastal regions bordering the Mediterranean Sea, **waste** is a significant **pressure** on coastal and marine environments, **causing visual pollution and contributing to beach and marine litter**. Such threats to the coast and sea are especially significant in areas where coastal dumpsites are still used or are used without rehabilitation.

# Land-based pollution sources

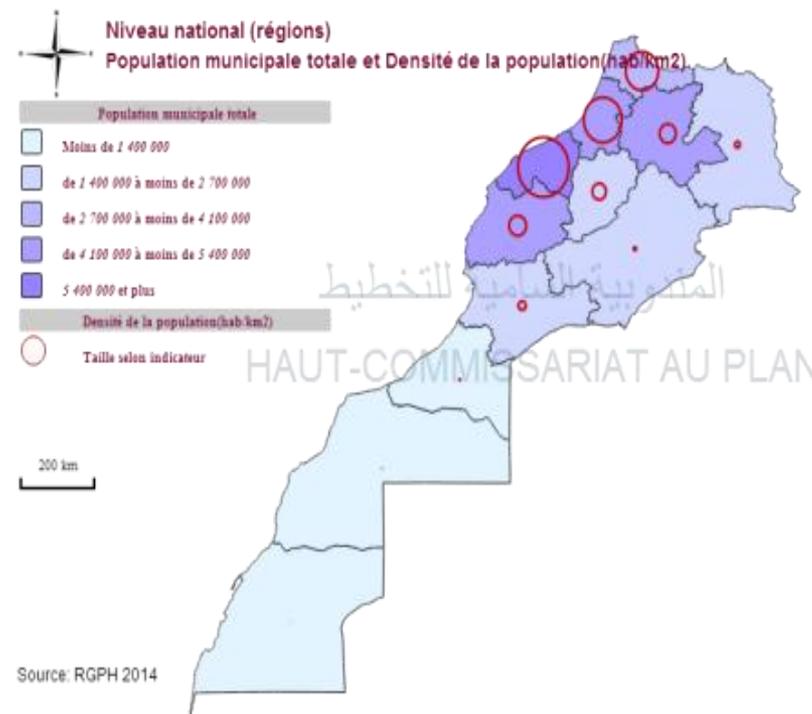
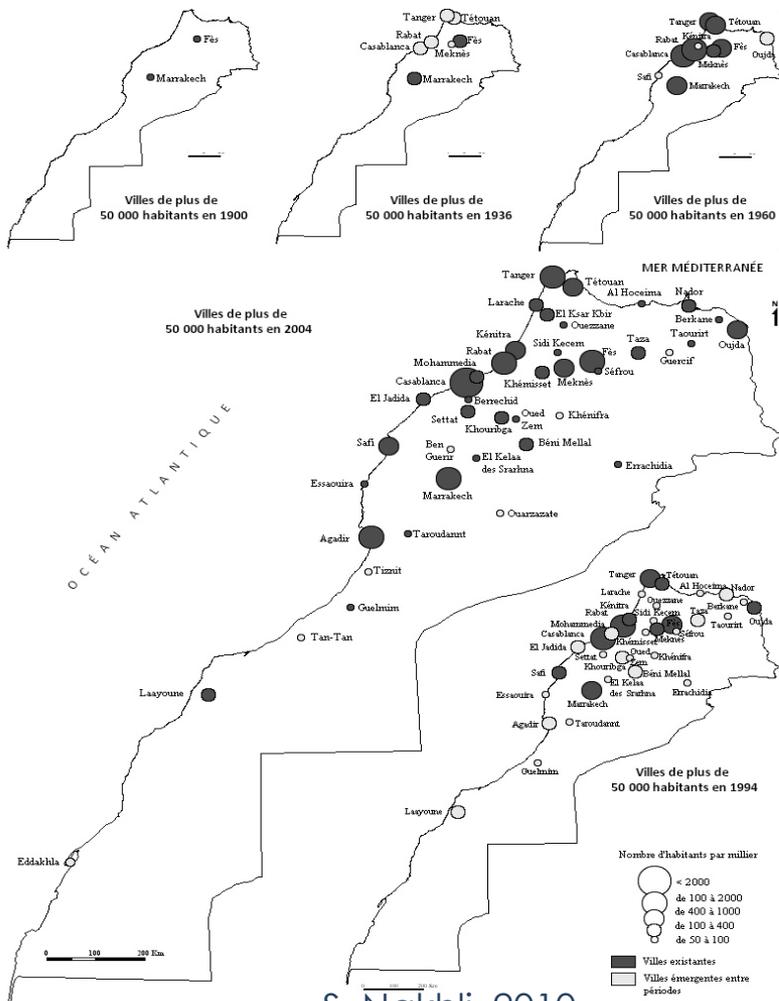
- **Industrial pollution** is generated on a wide scale along the Mediterranean coastline. Industrial pollution is one of the **major environmental pressures addressed by the Land-Based Protocol (LBS) of the Barcelona Convention** and its related policy and regulatory framework, at both regional and national levels.
- Most of the **countries** are making significant **efforts to control pollution** from this source by developing **specific strategies** for dealing with **wastewater treatment, solid waste management and abatement of air pollution**, and are issuing, inter alia, legislation on Effluent Limit Values (ELVs) for specific industrial sectors and/or specific pollutants, as well as Environmental Quality Standards (EQSs) for the receiving waterbodies (EEA-UNEP/MAP, 2014).

# Mediterranean Strategy for Sustainable Development

The Mediterranean Strategy for Sustainable Development (MSSD) **2016-2025** provides an integrative policy framework and a strategic **guiding document** for all stakeholders and partners to translate the **2030 Agenda for Sustainable Development** at the regional, sub regional and national levels. This is achieved through common objectives, strong involvement of all stakeholders, cooperation, solidarity, equity and **participatory governance**. 34 indicators have been agreed in relation to the following **6 objectives**:

- **Ensuring sustainable development** in marine and coastal areas
- **Promoting resource management**, food production and food security through sustainable forms of rural development
- **Planning and managing** sustainable Mediterranean cities
- **Addressing climate change** as a priority issue for the Mediterranean
- **Transition towards a green and blue economy**
- **Improving governance** in support of sustainable Development

# Population and Development : case of Morocco



In 1994, more than 4 cities are more than 2 million inhabitants

In 2014, 4 coastal regions encompass more than 50% of the population

# Population and Development : case of Morocco

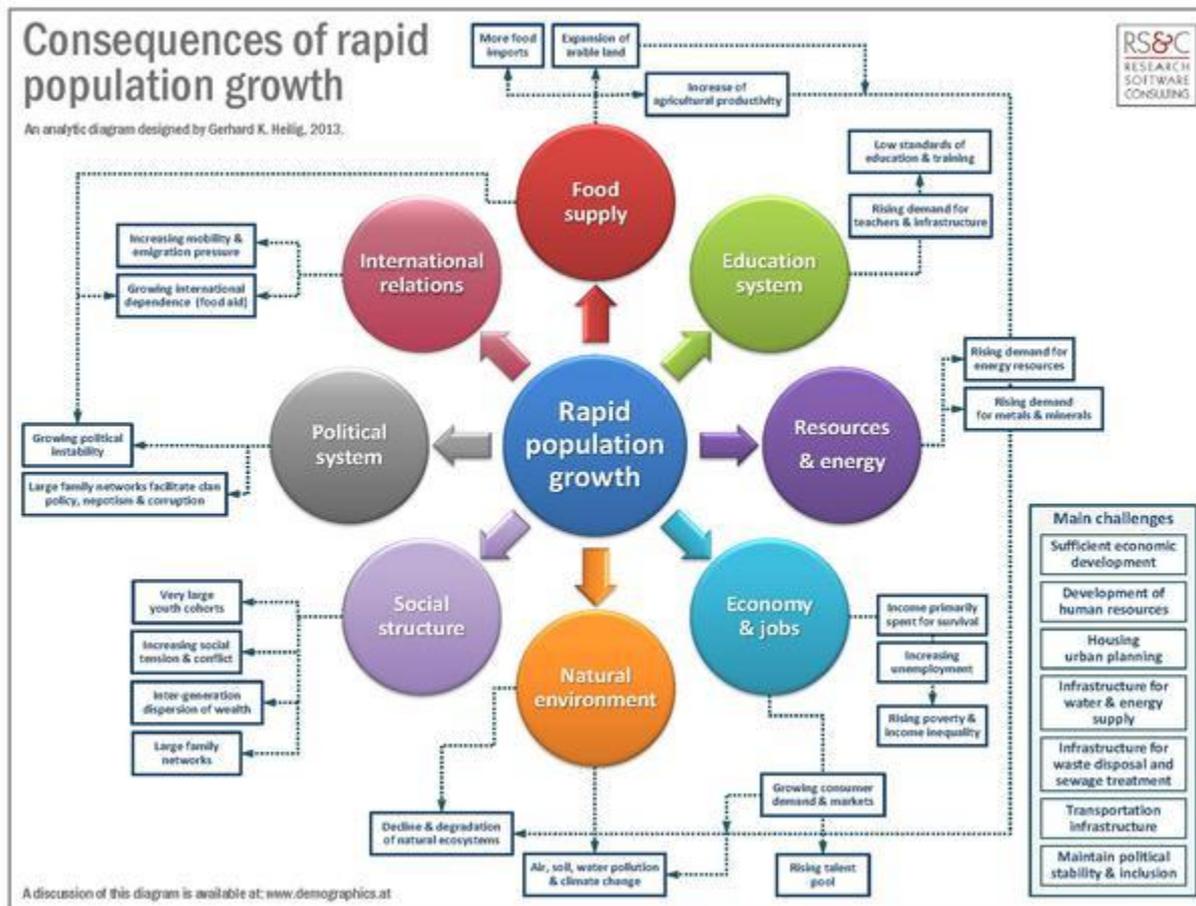


Population growth

Need jobs

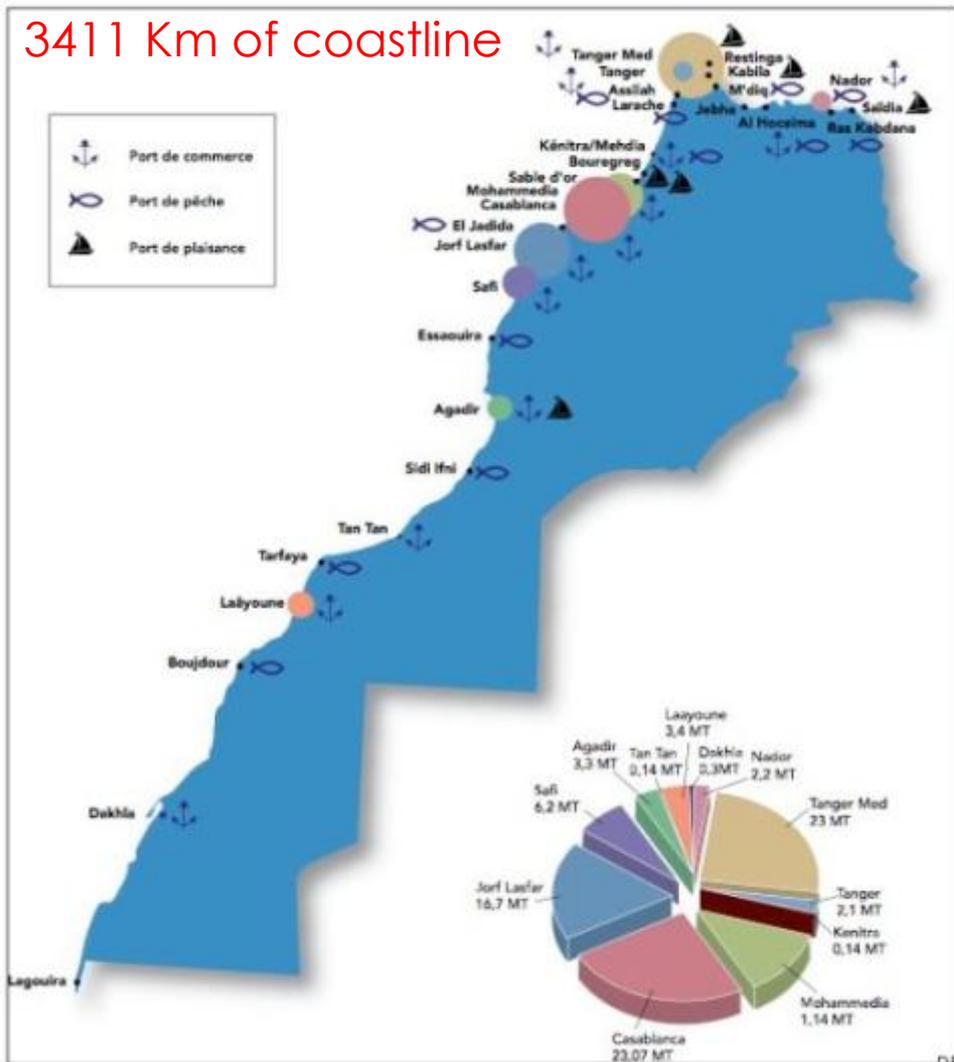
Need food

Tourism

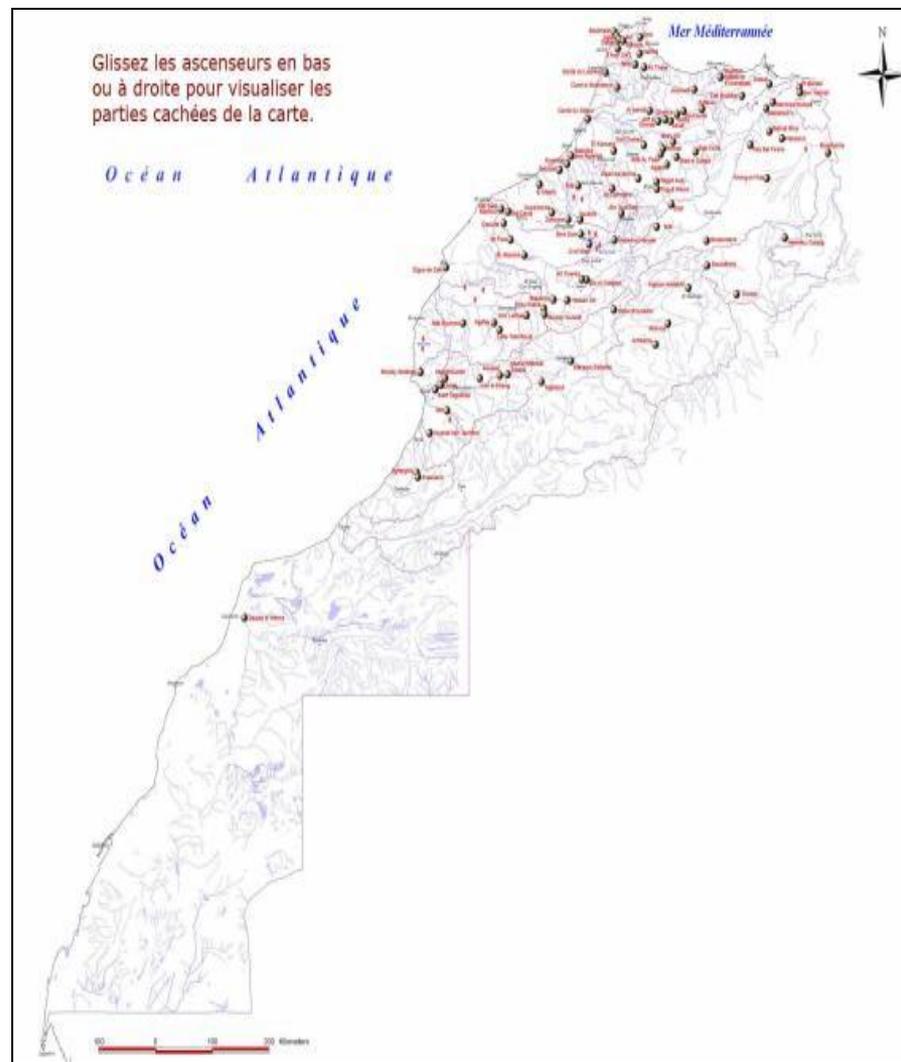


# Population and Development : case of Morocco

3411 Km of coastline



38 ports (13 commercial, 19 fishing and 6 pleasure)

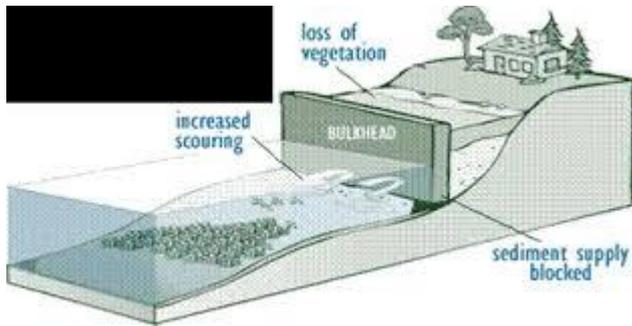


Morocco has 148 dams (large and hill)

# Population and Development : case of Morocco

## Dams

Decrease in sediment input to the coast



## Infrastructures (Ports)

Harbor dikes block the sedimentary transit  
They cause irreversible damage to landscapes and shoreline configuration by disrupting the sediment transport.



## Climate change

Sea level rise,

Changes in rainfalls





“Sustainable” is a much used, but rarely defined term. In the case of the Mediterranean, a sustainable coast is one that is:

**Resilient** – resilient to future uncertainties of **climate change**, including rising sea levels, warming and drought; resilient to **climate variability** such as extreme storms, floods, waves, etc; resilient to **earthquakes and erosion**; resilient to **negative impacts of human processes**, including the pressure of tourism and urban development on the coast.

**Productive** – productive **financially in traditional, modern and future economic sectors**; supporting the economic aspirations of the coastal community; **providing a competitive asset to the local economy**, high in natural and economic values – **increasing GDP** and alleviating poverty.

**Diverse** – **ecologically diverse**: a rich mosaic of **marine and terrestrial ecosystems**; diverse rural and urban landscapes, old and new; **a diverse economy** – providing a diverse, but distinctly Mediterranean experience; **a diverse society** – providing conditions for a rich mixture of social groups, **open to the outside world**, etc.

# Blue growth

**Distinctive** – retaining the cultural distinctiveness of coastal areas, including their architecture, customs and landscapes, recognising the Mediterranean as the „cradle of civilisation” – providing a distinctive marketing image on which to attract investment.

**Attractive** – retaining the attractiveness of the coast, not only to visitors but also to investors and local people to promote a self-sustaining cycle of sustainable growth.

**Healthy** – free from pollution from land and marine-based sources, with clean fresh and marine waters and the air – providing a healthy environment for people, natural resources such as fisheries, and wildlife.



# The 2030 Agenda for Sustainable Development Goals

The 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development — entered into force in 2016 and in recognition of the growing importance of the role of oceans in sustainable development, Goal 14 is to Conserve and sustainably use the oceans, seas and marine resources.



# The 2030 Agenda for Sustainable Development Goals

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) were adopted by world leaders in September 2015 at an historic **UN Summit**.

Over the **next fifteen years**, with these new Goals that universally apply to all, **countries will mobilize efforts** to end all forms of poverty, fight inequalities and **tackle climate change**, while ensuring that no one is left behind.

**While the SDGs are not legally binding**, governments are expected to take ownership and establish national frameworks for the achievement of the 17 Goals. **Countries have the primary responsibility** for follow-up and review of **the progress made in implementing the Goals**, which will require quality, accessible and timely data collection.

# The 2030 Agenda for Sustainable Development Goals

**Regional follow-up and review will be based on national-level** analyses and contribute to follow-up and review at the global level.

**In recognition of the growing** importance of the role of oceans in sustainable development, **Goal 14 is to Conserve and sustainably use the oceans, seas and marine resources**, and UN Environment will play a key role in contributing to the implementation of those environment-related indicators in coordination with other actors.

**As the importance of the regional dimension is increasingly recognized for the implementation of global agendas**, the Regional Sea Programmes are considered to be the units of marine ecosystems that can functionally provide services to human beings surrounding these seas.

Therefore, there **will be close coordination between Mediterranean countries and MAP** in support of the implementation and monitoring of relevant SDGs.



**Décembre 2018**

The blue economy: a pillar of a new development model from Morocco :

- **A new vision** is needed to unleash the potential for **creating wealth and jobs**, to enhance the potential of sectors **related to the blue economy**, while preserving marine ecosystems, using an inclusive, **sustainable and integrated approach**.
- By developing **new sectors** with high growth potential (**aquaculture, ecotourism, marine bioproducts or biotechnologies, shipbuilding, etc.**).
- The ESEC recommends ensuring a better **valuation of seafood** by **developing eco-responsible aquaculture, providing port services by supporting the development** of the Moroccan flag and encouraging the deployment of integrated ecosystems for construction and ship repair.

# Economic, Social and Environmental Council (CESE)

- It also suggests gradually reorienting the development of the **seaside tourism offer, reducing its impact on environmental ecosystems and developing ecotourism through sports, seaside and discovery activities, while involving local community upstream.**
- The Council calls for **investment in research and innovation around new sectors** related to the valuation of sea services, in particular with regard to **the development of marine biotechnologies and renewable energies, as well as environmentally sound desalination activities and the mining and fossil exploration and exploitation, areas with high potential synergies.**
- Finally, the report highlighted the **importance of introducing the blue economy in education and vocational training, by creating more specialized university courses in the maritime fields, for a skilled and competent blue workforce.**

## THE BLUE ECONOMY

uses smart shipping to lessen the impacts on the environment

is inclusive and improves the lives of all

harnesses renewable energy

is based on sustainable fisheries

takes action against illegal fishing

creates jobs, reduces poverty and ends hunger

conserves marine life and oceans

protects coastal communities from the impacts of climate change

tackles marine litter and oceans pollution

The infographic features a central globe icon and several illustrations: a cargo ship with smart shipping icons (laptop, satellite, shield), three diverse people, wind turbines and solar panels on a coastal island, a magnifying glass over a fishing boat, a plate of fish, a shark and coral reef, a coastal town with a palm tree, and a discarded plastic cup.

# Conclusion

Coastal issues are complex, but your strategy, your plan or your programme should not be (Zeljka Skaricic, PAP/RAC Director) . Just remember that ICZM is as much a social as it is a technical process, and coastal resources will always be limited. So here are a few practical tips to smooth your way:

- ✓ Keep it simple and fit for purpose – **don't over complicate**;
- ✓ Where possible, **work with what you have**, commission new work/research and data collection only where absolutely required;
- ✓ The Process should be **adaptive to local** circumstances and resources;
- ✓ **Communication is the key** – enabling stakeholders to visualise the problems, potential futures, and to find solutions;
- ✓ No ICZM Process should be **strictly linear**; all stages are iterative and will overlap depending on individual work plans;
- ✓ There is **no substitute for full stakeholder** participation.

# Conclusion

Process is designed not just to produce a plan or a strategy for a coastal area. In the end, **success** or failure of **ICZM depends on its ability to catalyse change**. This is what matters – not the specific process, **not the form of a strategy or plan document**, but whether or not **it results in positive action**.

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